

Appendix B – Definitions

Word	Definition
Acceptance Inspection	Inspection performed at the time an aircraft changes physical or reporting custody. Includes as a minimum, logs and records review, NAMIS baseline data entry, configuration verification to include any one-time inspections/replacements issued by NASA, and the equivalent of a preflight inspection. NASA may elect to increase inspection depth if the aircraft material condition or record examination indicates such actions are warranted.
Airworthy	The aircraft conforms to its type design and is in a condition for safe operation.
Airworthiness Review	A non-advocate peer review meant to ensure readiness for delivery of the system, end items and documentation. The AOD Chief is the final approval of airworthiness.
Alteration	A change that does not affect the basic character or structure of the end item it is applied to. It limits, qualifies or restricts an end item to a new purpose or end.
Audit	A periodic evaluation of detailed plans, policies, procedures, products, and data.
Avionics	Includes electronic, electrical, instruments, communication and navigation equipment and their subsystems taken either as independent equipment, or integrated systems to accomplish the mission.
Awaiting Parts	The condition that exists when materials are required to complete the maintenance action and these materials are not readily available; work cannot be performed on the item being repaired due to lack of ordered parts.
Beyond the Capability of Maintenance	A term/code used by the intermediate and/or depot level support shops when a repair is not authorized at that level or when a maintenance activity is not capable of being accomplished due to lack of equipment, facilities, technical skills, technical data, or parts.

Word	Definition
Bits and Pieces	Items that are normally treated as one piece of hardware, or are physically constructed of two or more pieces joined together in a way that prevents disassembly without destruction or impairment of the designed use. Examples of such items are nuts, screws, gaskets, seals, bearings, brushes, gears, fuses, light bulbs, tubes, capacitors, and resistors.
Certificated Aircraft	An aircraft certified for flight by the FAA, not a public use aircraft. Also see Type Certificated.
Combined, Preflight and Post-Flight Inspection	An inspection that encompasses the full scope of a pre-flight and post-flight inspection and is accomplished at the same time to satisfy both requirements.
Conditional Acceptance	The acceptance of supplies or services that do not conform to contract quality requirements, or are otherwise incomplete, that the contractor is required to correct or otherwise complete by a specific date.
Configuration	The functional and/or physical characteristics of hardware and software as set forth in technical documentation and achieved in a product.
Configuration Control	The procedures necessary to control the form, fit, and function of components, sub-systems, and systems.
Configuration Item	The term can be applied to anything designated for the elements of configuration management and treated as a single entity in the configuration management system. The entity must be uniquely identified so that it can be distinguished from all other configuration items.
Configuration Management System	A unique identification, controlled storage, change control, and status reporting of selected intermediate work products, product components, and products during the life of a system. The objective of this system is to avoid the introduction of errors related to incompatibilities with other configuration items.
Configuration Control Panel	A group of knowledgeable representatives that represent a cross-section of the organization (management, engineering, operations, safety, maintenance and quality) established to review and approve or disapprove configuration changes in the baseline configuration of an aircraft or asset.
Continual Improvement	An on-going effort to improve products, services or processes to increase the effectiveness and/or efficiency of an organization to fulfill its policy and objectives.

Word	Definition
Contract Quality Requirements	The technical requirements in the contract relating to the quality of product or service and those contract clauses prescribing inspection, and other quality controls incumbent on the contractor, to assure that the product or service conforms to the contractual requirements.
Contracting Officer	A person with the authority to enter into (purchase), administer or terminate contracts and make related determinations and findings.
Contracting Officer's Representative	A representative designated by the CO who performs primarily technical functions such as providing technical direction, inspection, approval of drawings, testing, and other functions or a technical or administrative nature not involving a change in the scope, price, terms or conditions of the contract.
Controlled Equipment	All non-sensitive equipment with an acquisition cost of \$5,000 or more and an estimated service life with two years or more, which will not be consumed or expended in an experiment. Also selected items of property with an acquisition cost less than \$5,000 that are designated and identified as sensitive, by the holding Center, such as weapons and certain types of hazardous devices.
Corrective Actions	Improvements to an organization's processes taken to eliminate causes of non-conformities or other undesirable situations to prevent their recurrence.
Customer-Supplied Product	Products, such as payloads and flight equipment, owned by NASA or another contractor for the purpose of flight processing, testing, storage, analysis, modification, and/or fabrication.
De-Dock/Post Dock Meeting	A formal meeting between NASA representatives and the Contractor for the purpose of identifying all maintenance requirements that were accomplished during the phase/major calendar/hourly inspection or depot work. Refer to AOD WI 34100 for additional information on these type meetings.
Deployment	The temporary relocation of an aircraft, support personnel, and equipment from JSC, AOD, Ellington Field, or AOD FOL, to other CONUS or OCONUS locations in support of AOD missions. Deployment does not apply to dispatching personnel to repair a NMCM aircraft away from EFD.
Depot	The facility where depot level maintenance is accomplished.

Word	Definition
Depot Level Maintenance ("D" Level)	Maintenance accomplished on aircraft or equipment requiring major rework or a complete rebuild of parts, assemblies, sub-assemblies and end items, including manufacture, alteration, testing and reclamation of parts as required. D-level maintenance is normally accomplished by personnel of higher technical skills and in facilities with more extensive shop facilities and equipment than available at the O and I level maintenance activities.
Discrepancy	A non-standard condition that is noted when operating or maintaining an aircraft/equipment that requires corrective action to restore the aircraft/equipment to normal operating conditions/parameters contained in approved technical data.
Due in for Maintenance	A system to track the status and location of repairable aircraft assets to be returned from repair/overhaul either at field level or depot level maintenance activities.
Engineering Data Management	The administration of documents or data related to engineering applications using computers and electronic storage media.
Engineering Project	A defined, bounded activity requiring engineering support.
Engineering Work Order	The Engineering Work Order (EWO), AOD Form 14, authorizes work on Johnson Space Center (JSC) aircraft and aircraft-related equipment. It provides detailed instructions, establishes a method of work control, collects historical records, and facilitates inspection. The EWO serves to combine documentation of change, test, fabrication, and repair into a single multi-use document. The EWO is required to initiate a configuration change (temporary or permanent) to any JSC aircraft, conduct tests where collection of engineering data is necessary, fabricate items for use on aircraft and support systems, develop software change/test instructions, or repair aircraft (refer to Material Review Board) where published technical information is not available.
Estimated Time-In Commission	Estimated date/time aircraft scheduled or unscheduled maintenance actions will be completed to restore the aircraft or end item to a full mission capable status. Refer to AOD WI 34100, Table 1, Not Mission Capable Maintenance for information on ETIC establishment.

Word	Definition
Familiar	Having a working knowledge for the area identified. Familiarization is normally achieved from prior military/commercial experience, formal class-room or on-the-job-training.
Failure Mode Effects and Criticality Analysis	Methodologies designed to identify potential failure modes for a product or process, to assess the risk associated with those failure modes, to rank the issues in terms of importance and to identify and carry out corrective actions to address the most serious concerns.
Fleet Modification Instructions	A document describing a modification to be incorporated on an entire aircraft fleet, group of aircraft, or a major system.
Flight Readiness Review	A thorough, impartial review by NASA Management and the support contractor to certify an aircraft is safe to fly its intended mission following completion of major structure repairs, modifications and/or alterations. Refer to AOD WI 33840 for additional information concerning Flight Readiness Reviews.
Forward Operating Location	A facility other than Ellington Field, operated by the Johnson Space Center, where maintenance and operations of JSC aircraft are performed
Functional Check	The functional check and operation of an end-item on the aircraft or in the support shops, using equipment, procedures, and limits in approved technical data. NASA components requiring Functional Checks are contained in CC-WD-F1 work cards located in the AOD Library.
Functional Check Flight	A flight to determine whether the airframe, power plants, accessories and equipment are functioning per predetermined standards while subjected to the intended operating environment. Refer to AOD WI 34100 for aircraft specific maintenance actions that generate FCF requirements.
Government Industry Data Exchange Program (GIDEP)	A cooperative activity between the Government and industry participants seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities and equipment.
Government Contract Quality Assurance	The various functions, including inspection, performed the Government to determine whether a contractor has fulfilled the contract obligations pertaining to quality and quantity.

Word	Definition
Ground Support Equipment	Powered or Non-Powered Support Equipment used to support maintenance in the servicing, repair, operation, removal/installation of equipment or test of aircraft and its related systems. Ground support equipment also includes Metrology and Calibration Equipment such as calibrated tools, test sets and other calibrated equipment that involves the use of approved instrument calibration procedures.
Hazard	Any real or potential condition that can cause injury or death to personnel, or damage to, or loss of equipment or property. This hazard may be a result of personnel error, environment, design characteristics, procedural differences, or sub-systems or component failure or malfunction.
Human Factors	Recognition that personnel performing tasks are affected by physical fitness, physiological characteristics, personality, stress, fatigue, distraction, communication and attitude.
Information Technology	Set of tools, processes, and methodologies (such as coding/programming, data communications, data conversion, storage and retrieval, systems analysis and design, systems control) and associated equipment employed to collect, process, and present information.
Inspection	The examination and testing of aircraft, engines, supplies and services, including raw materials, components, and intermediate assemblies, to determine whether they conform to specified requirements.
Intermediate Maintenance ("I" Level)	Maintenance which is the responsibility of, and is performed by designated maintenance activities for direct support of organizational maintenance activities. It includes, but is not limited to calibration, repair or replacement of damaged or unserviceable parts, components or assemblies, and the local fabrication of non-available parts.
JSC Expected Behaviors	A set of supporting behaviors for JSC contractors and civil servants that encompass the values of Safety, Teamwork and Integrity in support of Mission Success.
Key Characteristics	The features of a material, process, or part whose variation has a significant influence of product fit, performance, service life or manufacturability.
Life-Limited Component	Any component for which mandatory replacements limit (calendar, hourly, cycles or events) are specified in the type design, the Instructions for Continued Airworthiness, or approved maintenance manual.

Word	Definition
Maintenance	The function of retaining material in, or restoring it to, a serviceable condition. It includes servicing, inspecting, replacement, alterations, or defect rectification of an aircraft or an aircraft component that is performed after completion of manufacturing.
Maintenance Directive	Maintenance Directives (MD) apply to all AOD aircraft and aircraft-related systems. An MD refers to airworthiness directives, service changes, customer bulletins, service bulletins, engine bulletins, airframe bulletins, and airframe changes that are received from aircraft or component manufacturers, the FAA, and the DOD and to NASA locally-generated one-time inspections and one-time replacements. Approval to comply with or not comply with an MD will be via the AOD Form 1298; Maintenance Directive Tracking Form.
Material Review Board (MRB)	A Material Review Board, refer to Engineering Work Order, provides technical repair instructions when no other technical data is available or the existing technical publications, engineering drawings, or procedures are inadequate (does not apply to FAA certified aircraft).
May	This verb is used for stating non-mandatory goals (also refer to Should).
Monitoring	The supervising of activities in progress to ensure they are on-course and on-schedule in meeting the objectives and performance goals.
Mission Management Aircraft	Those administrative aircraft certified by the Federal Aviation Administration and used primarily for passenger transport. These include aircraft used to transport management and staff personnel on official travel for the purpose of satisfying mission requirements or other travel for the conduct of agency business.
NASA Aircraft Management Information System (NAMIS)	A Government provided automated database that provides an integrated system to support operations, maintenance and logistics requirements to enhance overall safety, organizational effectiveness and reduce program and organization costs.
Non-conformance	A condition of product or service in which any characteristics do not conform to specifications required and/or stated. This may include failures, deficiencies, defects, malfunctions and the like.

Word	Definition
Operational Check Flight	An in-flight check of lesser severity than a functional check flight that is flown to determine whether selected aircraft systems operate per predetermined standards while subjected to the intended operating environment. Refer to AOD WI 34100 for aircraft specific maintenance actions that generate OPS Check Flight requirements.
Organizational Maintenance (“O” Level)	Maintenance (scheduled or unscheduled which is the responsibility of, and is performed by, a using organization on its assigned equipment. It includes, but is not limited to inspecting (conditional, special, phase, calendar, cyclic, before/after flight, acceptance or transfer) servicing, lubricating, adjusting, replacing line replaceable units, mechanical accessories, electrical/hydraulic and minor assemblies and sub-assemblies.
Phase Inspection	A series of related inspections performed sequentially at specific intervals. These inspections are the result of dividing the maintenance requirements into small packages containing approximately the same workload.
Post-Flight Inspection	An inspection conducted after each flight to detect degradation or damage that may have occurred during the flight and to determine the need for servicing.
Pre-Dock Meeting	A formal meeting between NASA and the support contractor prior to the input of an aircraft into scheduled phase/major calendar/hourly inspections or depot work to identify all maintenance requirements that will be accomplished during these type inspections. Refer to AOD WI 34100 for additional information regarding Pre-dock Meetings.
Preflight Inspection	The final inspection conducted prior to the first flight of each flight day to ensure the aircraft is safe for flight and to verify proper servicing.
Preventive Maintenance	Systematic inspection, detection, correction, and prevention of early failures, before they become actual or major failures.
Process Control	Activities involved in ensuring a process is predictable, stable and consistently operating at the target level of performance with only normal variations.
Product Identification and Traceability	The ability to identify a product from applicable drawings, specifications, or other documents, during all stages of production, delivery, and installation.

Word	Definition
Program Support Aircraft	Aircraft used to support programs and mission operations. This includes, but is not limited to, astronaut training, safety chase, photo chase, cargo transport, flight training, range surveillance, launch security, and command and control.
Project Aircraft	An aircraft with a problem that cannot be solved with normal maintenance technical data, requiring engineering assistance. Specific anomalies will also cause an aircraft to become a project. Refer to AOD WI 33820 for additional information on Project Aircraft.
Project Engine	An engine with a problem that cannot be solved with normal maintenance technical data, requiring engineering assistance. Specific anomalies will also cause an engine to become a project. Refer to AOD WI 33820 for additional information on Project Engine.
Property, Plant and Equipment System	An agency-wide tool/system used throughout the agency to identify, control and account for Government-owned equipment acquired by or in use by NASA and its Contractors.
Public Use Aircraft	An aircraft operated by or on behalf of the Government.
Qualifications	Training or competencies, which provide an individual the necessary skills, knowledge, or credentials to perform a specific function. These qualifications are normally achieved from prior military/commercial experience, formal classroom or on-the-job-training.
Quality Management System (QMS)	A system by which an organization aims to reduce and eventually eliminate non-conformances to specifications, standards, and customer expectations in the most effective and efficient manner.
Receiving Inspection	An inspection to verify that purchased products conform to specified purchase requirements. Verification activities may include obtaining objective evidence of the quality of the product from suppliers to include accompanying documentation, certificate of conformity, test reports, statistical records and establishment of process controls to ensure key characteristics have been met.
Risk Management	The process of identifying, analyzing, communicating and management of organizational risk.

Word	Definition
Scheduled Maintenance	Known or predictable maintenance requirements based on calendar, hourly, events, or cycles, that can be planned or programmed for accomplishment on short and long-range schedules. This includes accomplishing recurring scheduled maintenance inspection and servicing, complying with configuration items, accomplishing scheduled time change item replacements, and correcting delayed or deferred discrepancies. It also includes modification and renovation projects that are programmed for depot.
Service Bulletin	A document which directs a one-time inspection of an in-service aircraft, system, sub-assemblies, components or piece of support equipment. These documents are normally issued by Federal Aviation Authority (FAA) or DoD.
Service Change	A document which directs and provides instructions for the accomplishment of a change, modification, repositioning or alteration of material in an in-service aircraft, system, sub-assemblies, components or piece of support equipment from its original design. These documents are normally issued by Federal Aviation Authority (FAA) or DoD.
Sensitive Equipment and Parts	An item of equipment that, due to its pilferable nature or the possibility of it being a hazard, requires a stringent degree of control. A sensitive item can be capital or non-capital. Generally, sensitive items are controlled at an acquisition cost of \$500 or more.
Serviceable Condition	The condition of an item that is capable of performing its purpose and function to the requirements for which it is originally intended.
Servicing	The replenishing of all fluids, fuel, oil, water methanol, as well as cleaning the aircraft exterior and interior, cleaning food dispensing equipment, ice chests, coffee pots, hot cups, chemical toilets, as required. This may also include storage of meals on the aircraft.
Shall	This is the only verb for binding requirements.
Should	This verb is used for stating non-mandatory goals (also refer to May).
Surveillance	The quality practice of on-going monitoring and verification of the status of conditions, methods, procedures and products, and analysis of associated records to ensure that the established requirements are being complied with.

Word	Definition
Technical Data	Data that is necessary to ensure that the aircraft and related systems can be maintained in a condition such that serviceability and airworthiness of the aircraft and related operational and emergency equipment, is assured. This data includes computerized maintenance program (CMP) cards, NASA/Department of Defense (DoD) technical orders and work cards, manufacturer's maintenance manuals, Aircraft Operations Division (AOD) unique work instructions (WIs), engineering work orders (EWOs), fleet modification instructions (FMIs), engineering drawings, test procedure – flight research project (TP-FRP) instructions, Federal Aviation Authority (FAA)-approved original equipment manufacturer (OEM) standards, aircraft change directives (ACDs) (e.g. airworthiness directives, service bulletins, etc) and any other subscriptions, data, and specifications.
Test Procedure-Flight Research Project	An approved, repetitive inspection or test on NASA aircraft, components or ground support equipment.
Test Readiness Review	A thorough, impartial review by NASA Management and the support contractor to certify an aircraft is safe to fly its intended mission following completion of major structure repairs, modifications and/or alterations. A TRR can be held for payloads/experiments that are conducted within the confines of the aircraft including minor protrusions outside of the aircraft that do not affect drag. Refer to AOD WI 33840 for additional information concerning Test Readiness Reviews.
Through-Flight Inspection	An inspection conducted on an aircraft between flights flown on the same day to ensure the integrity of the aircraft for flight, verify proper servicing, and to detect any degradation that may have occurred during the previous flight.
Training	The process of providing knowledge and skills to individuals to better enable them to perform their current duties or future duties. Training may include job-specific training such as a series of instructions or proficiency demonstrations leading to a qualification.

Word	Definition
Transfer Inspection	Inspection performed at the time an aircraft changes physical or reporting custody. Includes as a minimum, logs and records review, NAMIS data storage, and the equivalent of a preflight inspection. NASA may elect to increase inspection depth if the aircraft material condition or record examination indicates such actions are warranted.
Troubleshooting	The logical, analytical, and where applicable, an approved technical order prescribed procedure followed in isolating aircraft/equipment malfunctions.
Type Certificated	Aircraft with FAA airworthiness certificates.
Unscheduled Maintenance	Unpredictable maintenance requirements, maintenance not previously planned or programmed, maintenance requiring prompt attention and must be added to, integrated with, or substituted for previously scheduled workloads. This includes, but is not limited to, compliance with immediate action aircraft change directives, correction of discrepancies discovered during flight or operation of equipment, and performance of repairs as a result of accidents or incidents.
Will	This verb is used for stating facts or declaration of purpose.
Work Instruction	A document that describes how to accomplish specific job activities needed to ensure consistent working methods and achieve the required quality standard.